A6 cancel'd

of, and 3' to, the GAL1 promoter. The resulting plasmids were transformed into yeast as described in Example 1.--

Please add the enclosed Sequence Listing to the application after the figures.

In the Claims:

Please cancel claims 1-9, 14-15, and 18-30.

The pending claims, including claim 10 as amended, are as follows.

Please amend claim 10 as follows:

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10. (Amended) An isolated polypeptide selected from the group consisting of: a polypeptide having at least 80% sequence identity to SEQ ID NO:2, a polypeptide having at least 80% sequence identity to SEQ ID NO:4, a polypeptide having at least 80% sequence identity to SEQ ID NO:6, a polypeptide having at least 80% sequence identity to SEQ ID NO:12, and a polypeptide having at least 80% sequence identity to SEQ ID NO:14.

11. The polypeptide of claim 10, wherein said amino acid sequence is SEQ ID NO:2.

12. The polypeptide of claim 10, wherein said amino acid sequence is SEQ ID NO:4.

13. The polypeptide of claim 10, wherein said amino acid sequence is SEQ ID NO:6.

16. The polypeptide of claim 10, wherein said amino acid sequence is SEQ ID NO:12.

17. The polypeptide of claim 10, wherein said amino acid sequence is SEQ ID NO:14.

Please add the following new claims:

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31. An isolated polypeptide having the amino acid sequence of SEQ ID NO:8.

32. An isolated polypeptide having the amino acid sequence of SEQ ID NO:10.

33. A transgenic plant containing a nucleic acid that encodes a polypeptide selected from the group consisting of: a polypeptide having at least 80% sequence identity to SEQ ID NO:2, a polypeptide having at least 80% sequence identity to SEQ ID NO:4, a polypeptide having at least 80% sequence identity to SEQ ID NO:6, a polypeptide having at least 80% sequence identity to SEQ ID NO:12, and a polypeptide having at least 80% sequence identity to SEQ ID NO:14.

34. The plant of claim 33, wherein expression of said nucleic acid is tissue-specific.

35. The plant of claim 34, wherein said expression is epidermal cell-specific expression.

36. The plant of claim 34, wherein said expression is seed-specific expression.

37. The plant of claim 33, wherein said plant has altered levels of very long chain fatty acids in seeds compared to the levels in a plant lacking expression of said nucleic acid.

38. A transgenic plant containing a nucleic acid that encodes a polypeptide having the amino acid sequence of SEQ ID NO:8.

39. A transgenic plant containing a nucleic acid that encodes a polypeptide having the amino acid sequence of SEQ ID NO:10.

40. A method of altering the levels of very long chain fatty acids in a plant, comprising the step of:

introducing a nucleic acid construct into a plant, wherein said nucleic acid construct encodes a polypeptide selected from the group consisting of: a polypeptide having at least 80% sequence identity to SEQ ID NO:2, a polypeptide having at least 80% sequence

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identity to SEQ ID NO:4, a polypeptide having at least 80% sequence identity to SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:10, a polypeptide having at least 80% sequence identity to SEQ ID NO:12, and a polypeptide having at least 80% sequence identity to SEQ ID NO:14, wherein said construct is expressed and wherein said polypeptide is effective for altering the levels of very long chain fatty acids in said plant.